A flow is laminar or turbulent depending on the value of its Reynolds number Re, which is given by $Re = UL/v$, where L is a characteristic length of the flow, U is a characteristic speed of the flow, and v is the fluid kinematic coefficient of viscosity. When the Reynolds number is below a critical value, the fluid viscosity ~~smooths out~~ <u>causes an averaging of the</u> lateral velocity variations, and laminar flow is favored.

Amendments have previously been made to the Specification in the response to International Search Report of 08 July 2005. In the response the paragraph on page 20 lines 6 - 23 was amended as follows and is incorporated herein:

Refer now to Fig. 5B. Signals generated by the microphone are coupled to an analog low pass filter and analog to digital converter 5-9 wherein frequencies ~~above~~ <u>below</u> 100Hz, for example, are converted to digital format at a ~~400~~ <u>500</u>Hz rate~~, for example~~. The digital signals at the output of the low pass filter and analog to digital converter 5-9 are coupled to a fast Fourier transform (FFT) unit 5-10 wherein a 4096 point FFT is performed that is repeated every second. Based on a 500Hz A/D sampling rate, the waveform processed by the FFT algorithm each second is 8 seconds long. Only the outputs of frequency bins up through 15 Hz are retained. The FFT frequency resolution is about 0.12 Hz. The FFT 5-10 output is coupled to a calculator 5-11 wherein the mean frequency, the 6dB bandwidth, and the rms amplitude of the FFT bins within the 6dB bandwidth are calculated. These three computed quantities are coupled to a comparator 5-12 which determines whether the following three conditions are simultaneously satisfied over a period of 30 seconds: (1) the calculated rms bin amplitude within the 6dB bandwidth is greater than a predetermined value, (2) the calculated mean

frequency is less than a predetermined value, and (3) the calculated 6dB bandwidth is greater than a predetermined value. When the preceding conditions are met, the comparator 5-12 provides a signal to open a gate 5-16 which activates the tornado alarm and display 5-13.

After a through review of the application it has been determined that no other amendments need be made.

Amendments to the Claims:

claim 4 line 7 after "disturbance;" add <u>and</u>

line 8 delete "and"

lines 9 and 10 delete "establishing an existence of an atmospheric disturbance when said infrasound coupled to said atmospheric detector exceeds said computed threshold"

In the response to the Search Report amendments were made to Claims 1 and 6 as follows:

claim 1 line 3 delete "a computed" and insert --an-- therefore

line 5 delete "locations" and insert --existence-- therefore

claim 6 line 2 delete "detecting" and insert --providing-- therefore

The above amendments have been incorporated in Claims 1 and 6 and these claims are listed as "previously presented"

Also in response to the Search Report, new claims 26 - 36 were added. These claims are also listed as "previously presented".

These amendments to the claims are reflected in the listing that follows which will replace all prior versions, and listings, of claims in the application.